

# इंटरनेट

# मानक

## Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 8298 (1976): Towing Jaw for Use Between Trailers of Up to 5 Tonnes Gross Mass and Transport Tractor [TED 22: Transport Tractors and Trailers]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”



BLANK PAGE



# *Indian Standard*

## SPECIFICATION FOR TOWING JAW FOR USE BETWEEN TRAILERS OF UP TO 5 TONNES GROSS MASS AND TRANSPORT TRACTOR

UDC 629.114.3.013 : 621.868.238.2.061.1



© Copyright 1977

INDIAN STANDARDS INSTITUTION  
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG  
NEW DELHI 110002

Price Rs 5.00

Gr 2

May 1977

# Indian Standard

## SPECIFICATION FOR TOWING JAW FOR USE BETWEEN TRAILERS OF UP TO 5 TONNES GROSS MASS AND TRANSPORT TRACTOR

Transport Tractors and Trailers Sectional Committee, MCPD 10

### Chairman

SHRI K. RAMACHANDRAN

### Representing

Ashok Leyland Ltd, Madras

### Members

SHRI R. RAMAKRISHNAN (Alternate to  
Shri K. Ramachandran)

SHRI V. ANAND

Research, Designs & Standards Organization  
(Ministry of Railways), Lucknow

SHRI B. M. CHOPRA (Alternate)

SHRI S. B. CHANDORKAR

Kirloskar Oil Engines Ltd, Pune

SHRI A. D. ARJUNWADKAR (Alternate)

SHRI S. P. DAYANITHY

Ministry of Defence (DGI)

MAJ D. V. KHER (Alternate)

BRIG G. K. GOKHALE

Bharat Earth Movers Ltd, Bangalore

SHRI K. T. SAMPATHGOPAL (Alternate)

SHRI B. D. KERAWALLA

The Premier Automobiles Ltd, Bombay

SHRI G. Y. BHATT (Alternate)

SHRI N. H. KESWANI

Ministry of Shipping & Transport (Roads Wing)

SHRI K. R. NATARAJ

Southern Roadways Pvt Ltd, Madurai

SHRI B. R. PAHOJA

Khushiram Tarachand Pvt Ltd, Bombay

SHRI G. R. REDDY

The Hyderabad Allwyn Metal Works Ltd,  
Hyderabad

SHRI I. K. SAMA

Indian Tyre Technical Advisory Committee,  
Sahaganj

SHRI K. P. MITRA (Alternate)

SHRI B. K. SATAPATHY

Hindustan Motors Ltd, Hooghly

SHRI R. C. SETHI

Vehicle Research & Development Establishment  
(Ministry of Defence), Ahmednagar

SHRI A. M. SHAH

Mahindra Owen Ltd, Pune

SHRI P. D. DESHPANDE (Alternate)

(Continued on page 2)

© Copyright 1977

INDIAN STANDARDS INSTITUTION

This publication is protected under the *Indian Copyright Act* (XIV of 1957) and reproduction in whole or in part by any means except with written permission of the publisher shall be deemed to be an infringement of copyright under the said Act.

( Continued from page 1 )

*Members*

SHRI K. SRINIVASAN

SHRI R. G. LYNN ( *Alternate* )

SHRI P. S. DAS,  
Director ( MCPD )

*Representing*

Tata Engineering & Locomotive Co Ltd,  
Jamshedpur

Director General, ISI ( *Ex-officio Member* )

*Secretary*

SHRI S. CAPOOR  
Deputy Director ( MCPD ), ISI

## *Indian Standard*

# SPECIFICATION FOR TOWING JAW FOR USE BETWEEN TRAILERS OF UP TO 5 TONNES GROSS MASS AND TRANSPORT TRACTOR

### 0. FOREWORD

**0.1** This Indian Standard was adopted by the Indian Standards Institution on 31 December 1976, after the draft finalized by the Transport Tractors and Trailers Sectional Committee had been approved by the Marine, Cargo Movement and Packaging Division Council.

**0.2** The requirements of this standard, which relate only to vehicles used on the public highways, are intended to ensure the maximum degree of compatibility between commercial and government department standards.

**0.3** Towing jaws may be forged or cast.

**0.4** The material specifications are for the minimum qualities acceptable, and do not exclude the use of other materials provided that these are at least equal in quality so that road safety is not impaired.

**0.5** This standard should be used in conjunction with IS : 8274-1976\*. The jaw has been designed to accommodate a drawbar eye of 51 mm internal diameter and 31 mm stock.

**0.6** The standard applies to connections to trailers of up to 5 tonnes gross mass. The specification for a towing jaw for connections to trailer of up to 35 tonnes gross mass is given in IS : 8296-1976† and for trailer of up to 16 tonnes gross mass in IS : 8297-1976‡.

**0.7** In the preparation of this standard, considerable assistance has been derived from BS AU 24:1964 'Specification for towing connection for use between trailers of 2-5 tonnes gross weight and towing vehicle', issued by the British Standards Institution.

---

\*Specification for drawbar eyes and forecarriage pins for connection between trailers of gross mass above 5 and up to 35 tonnes and transport tractor.

†Specification for towing jaw for use between trailers of up to 35 tonnes gross mass and transport tractor.

‡Specification for towing jaw for use between trailers of up to 16 tonnes gross mass and transport tractor.

## 1. SCOPE

**1.1** This standard specifies the basic dimensions and materials for a towing jaw and its mountings, for use in connections between a transport tractor and a trailer of up to 5 tonnes gross mass.

**1.2** The gross mass refers to gross laden train masses where more than one trailer is drawn.

## 2. MATERIALS

**2.1** The jaw shall be made from a material of quality not less than Grade C 20 of IS : 1875-1971\* (normalized condition) for the forged jaw and Grade 23-45 of IS : 1030-1974† for the cast jaw.

**2.2** The towing pin shall be made from a material of quality not less than Grade 35 Mn2 Mo28 steel of IS : 5517-1969‡.

## 3. DIMENSIONS

**3.1** Dimensions shall be as shown in Fig. 1, except where the vehicle is not constructed, or adopted, for the carriage of goods and the trailer gross mass does not exceed 3 500 kg; in which case the following variations are permissible:

- a) The diameter of the pin may not be less than 22 mm and the pin shall be secured by a suitable retaining device not less than 6 mm in diameter; and
- b) The included jaw angle shall not be less than 30°.

## 4. DESIGN

**4.1** An efficient safety locking device shall be provided as indicated in Fig. 1 to prevent accidental extraction of the towing pin from the jaw.

**4.2** The jaw shall be so designed that a bar of 32 mm diameter, shall pass freely between the pin and the inside face of the jaw (see Fig. 1).

## 5. MOUNTING

**5.1** The jaw shall be mounted with four bolts of 12 mm diameter conforming to designation M 12 × 1.5 (P) of IS: 1364-1967§ at 45 × 86 mm centres. This renders it interchangeable in mounting with hooks specified in Indian Standard specification for towing hook for use between trailers of up to 5 tonnes gross mass and transport tractor (*under preparation*).

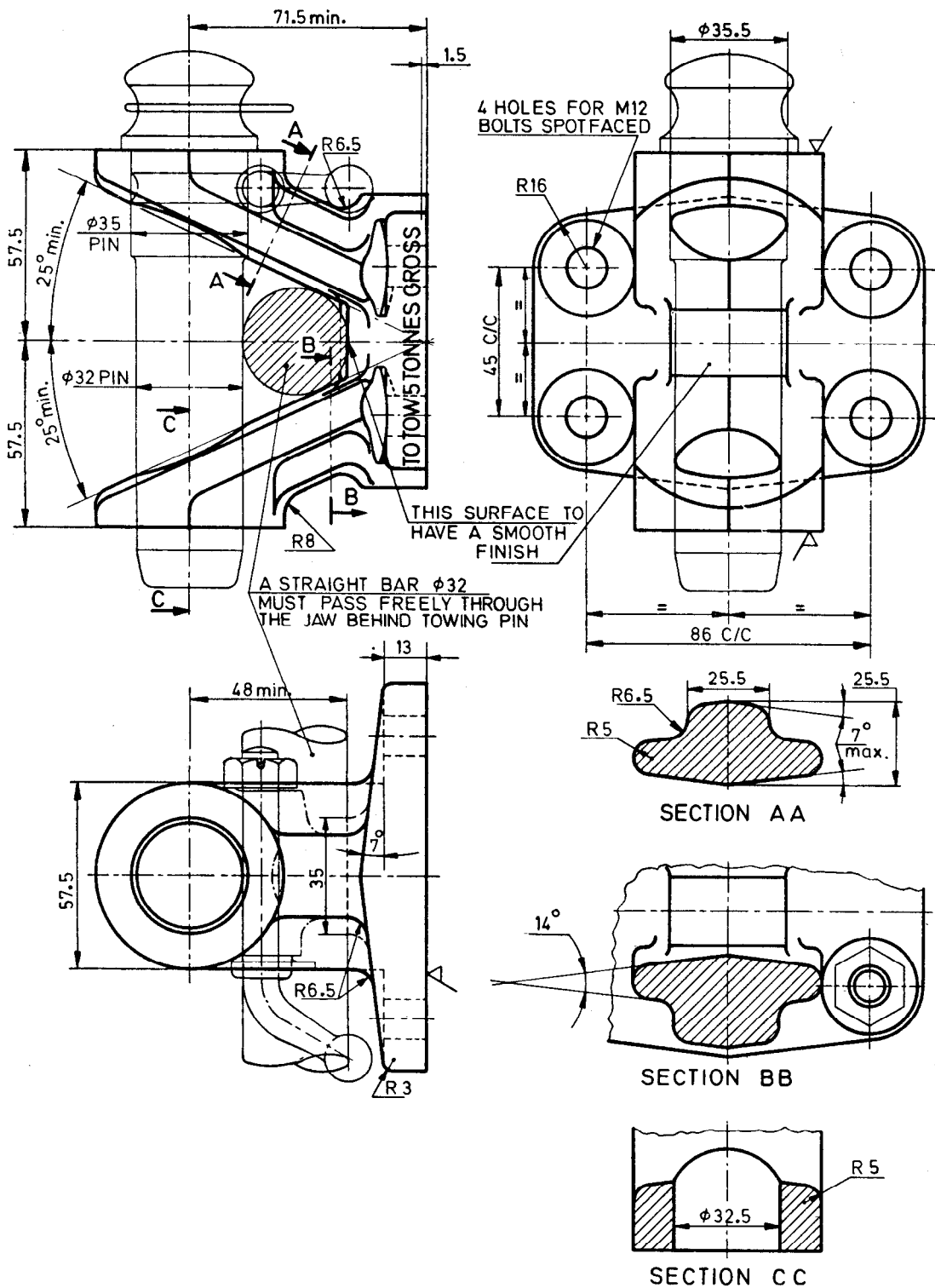
\*Specification for carbon steel billets, blooms, slabs and bars for forgings (*third revision*).

†Specification for carbon steel castings for general engineering purposes (*second revision*).

‡Specification for steel for hardening and tempering.

§Precision and semi-precision hexagon bolts, screws, nuts and lock nuts (dia range 6 to 39 mm) (*first revision*).





All dimensions in millimetres.

FIG. 1 TOWING JAW FOR TRAILERS UP TO 5 TONNES

As in the Original Standard, this Page is Intentionally Left Blank

**5.2** The nuts shall be secured either by peening the end of the bolt or by fitting a positive locking device such as a safe locking nut or a slotted nut and split pin.

## **6. MARKING**

**6.1** The following wording, in clear lettering 6 mm high, raised or stamped, shall be marked on each towing jaw:

- a) 'TO TOW 5 TONNES GROSS' on one side, and
- b) 'IS : 8298-1976' on the other side.

**6.2** In addition, the towing jaws shall also be marked at the appropriate place, with the following information:

- a) Name or trade-mark of the manufacturer,
- b) Date or year of manufacture, and
- c) The country of manufacture.

**6.2.1** The towing jaw may also be marked with the ISI Certification Mark.

**NOTE** — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution ( Certification Marks ) Act and the Rules and Regulations made thereunder. The ISI Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-defined system of inspection, testing and quality control which is devised and supervised by ISI and operated by the producer. ISI marked products are also continuously checked by ISI for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

**INDIAN STANDARDS**  
**ON**  
**TRANSPORT TRACTORS AND TRAILERS**

**IS:**

- 6763 ( Part I )-1972 Specification for fifth wheel king pins for trailers: Part I 50·8 mm diameter
- 6763 ( Part II )-1976 Specification for fifth wheel king pins for trailers: Part II 89 mm diameter
- 7774 ( Part I )-1975 Glossary of terms relating to transport tractors and trailers: Part I Basic terms
- 7774 ( Part II )-1975 Glossary of terms relating to transport tractors and trailers: Part II Dimensions and weights
- 8007-1976 Dimensions of fifth wheel coupling between transport tractors and semi/articulated trailers for interchangeability
- 8037-1976 General requirements for transport tractor-trailers
- 8274-1976 Specification for drawbar eyes and forecarriage pins for connection between trailers of gross mass above 5 and up to 35 tonnes and transport tractor
- 8296-1976 Specification for towing jaw for use between trailers of up to 35 tonnes gross mass and transport tractor
- 8297-1976 Specification for towing jaw for use between trailers of up to 16 tonnes gross mass and transport tractor
- 8298-1976 Specification for towing jaw for use between trailers of up to 5 tonnes gross mass and transport tractor
- 8299-1976 Specification for towing hook for use between trailers of up to 16 tonnes gross mass and transport tractor
- 8300-1976 Specification for towing hook for use between trailers of up to 35 tonnes gross mass and transport tractor